



NATIONAL AYUSH MISSION KERALA



STANDARD OPERATING PROCEDURE

# SUPRAJA

AYUSH MATERNAL & NEO-NATAL INTERVENTION



# **SUPRAJA: AYUSH Maternal & Neo-natal Intervention**

## **Purpose**

The purpose of this Standard Operating Procedure (SOP) is to establish a consistent protocol for potential program implementers to effectively execute the SUPRAJA program and monitor its activities uniformly across the State of Kerala

## **Introduction:**

Pregnancy is a process that invites you to surrender to unseen force behind all life-Judy Ford. Pregnancy is a time period for many changes, mainly physical, physiological, psychological and emotional. During this period every woman need complete care and support by the people around her. WHO has put forward a protocol for the unique care for every pregnant woman, known as ante natal care. The current prevalence rate of operative deliveries in kerala is 40% and also that of high-risk pregnancy is around 49%. The normal antenatal care provided by WHO has working a great role to make a reduction in this value since then there is not much change.

Here comes the role of Ayurvedic Antenatal care which can greatly influence to reduce these values. Ayurveda gives enormous emphasis on the importance of caring for the mother before, during and after pregnancy. Aim of prenatal care by Ayurveda aims to achieve proper growth of the fetus, uncomplicated pregnancy, normal healthy delivery of fetus and wellbeing of both mother and child.

Ayurveda have prescribed monthly dietary regimen and lifestyle practices for whole pregnancy according to the need of mother's health and foetal growth and well-being. The main aim is to make people aware about the importance of Antenatal care through Ayurveda by different sources. Reports from primary health centers also indicate Ayurveda is effective in addressing morbidities during antenatal period. In kerala currently Women and Children Ayurveda hospital under Government Ayurveda college Thiruvananthapuram is the only place where both allopathic and Ayurveda gynecology goes parallel to each other for better enrollment of participants.

## **Objectives**

1. To obtain a good fetal wellbeing and to ensure the birth of a healthy baby from a healthy mother.
2. To prevent any complications and to reduce the incidence of operative deliveries.
3. To reduce the incidence of abnormal puerperium

4. To provide Ayurvedic healthcare to pregnant women, lactating mothers and infants to enhance their physical and mental well-being.
5. To make peoples aware about the relevance of Ayurvedic antenatal and postnatal care.

**Target Group:**

Pregnant women, lactating mothers and infants across all districts of Kerala

**Implementation strategy**

1. Setting up of Supraja clinic with all necessary amenities
2. A Project Monitoring Committee should be established at both state and district levels to ensure effective oversight and coordination.
3. Dedicated personnel, including State and District Project Coordinators, Medical Officers, Multi-Purpose Workers, and Health Workers/ASHA, should be recruited and trained.
4. Team building: Form a block level team of a specialist medical officer, yoga Masters, Multipurpose workers, Asha and Anganwadi teachers.

❖ **Outreach activity and promotion**

5. Conduct awareness session regarding importance of Ayurveda post-natal care and antenatal care at Anganwadi's or any other AYUSH health institutions.
6. Anganwadi teachers and ASHA workers should receive prior notification about the session, enabling them to inform pregnant women accordingly.
7. A list of sessions should be conducted in one quarter (3 months) will be made along with all the necessary details. The team of one AYUSH Doctor & and one Multi-Purpose Worker (MPW) should visit 1 anganwadi from each ward in each week and conduct awareness classes on Importance of Ayurveda Post -natal and Antenatal care. Instead of anganwadi's, awareness session can be conducted at AYUSH health centres according to the feasibility. A detailed plan of visit including team members, visiting institution, planned activity, expected beneficiaries, contact number of institution head, manuals and IEC materials to be taken should be noted in the work plan register.
8. Medical camp along with awareness session may be done in consensus with other stakeholder's including the local health providers, the local community leaders, local self-government representatives, Self-help groups and NGOs in the area.
9. The IEC materials should be prepared including videos in association with NAM mass media for further promotional activities. Different Mass communication medias can be utilized for promotional activities.
10. Every outreach activity must be digitally photographed containing place, beneficiaries' activity and speaker /lead role makers and in case of online seminars, screen shot should be made.

## ❖ OPD Clinic

11. Detailed examination of pregnant women should be conducted to assess the physical and physiological health status.

### • Examinations

- A. General examination – Height, weight, B.P, Pulse rate, heart rate, respiration, pallor, jaundice, any infection of the body will be examined properly in all visits (weight gain during the pregnancy for a healthy woman on average -11kgs)
- B. Systemic examination -systemic examination of respiratory, cardiovascular, GIT, Genitourinary system will be examined properly to find out any abnormalities and record in Supraja record.
- C. Local examination (Obstetrical): Local examination is particularly focused on assessing changes occurring in the genital tract and breasts. Abdominal examination is conducted to evaluate growth, fundal height, presentation of the fetus, and fetal movements. Fetal heart sounds (FHS) are auscultated and monitored regularly (Normal 120-140 beats /min).
- D. Laboratory investigations: Laboratory investigation data either collected and entered from their previous record if not available then fresh investigation will be done.
  - a. Blood- CBC, HB% to be repeated at 20th, 28th, 36th and just before delivery (if anemia is present then the test is repeated as and when required).
  - b. Blood group & RH Factor
  - c. OGTT (Oral glucose tolerance test with 75 gm glucose)
  - d. Blood sugar (fasting and postprandial)
  - e. T3, T4, TSH
  - f. VDRL
  - g. HIV
  - h. HBsAg / Hepatitis-B
  - i. BT/CT
  - j. Urine analysis- Routine and Microscopic
  - k. USG abdomen
  - l. Immunization
    - 1st dose-Inj TD – as early as possible or during 1st visit
    - 2nd dose -Inj TD - after 4 weeks of pregnancy

Note\* -any other special investigation may be performed as per need.

12. Prenatal advice consists of Dietary advice, Monthly regime, medicines, Immunization, Lifestyle modification, Yogasana, Pranayama, Medication and others

### a) Dietary advice

**Month-wise regimens** to be adopted in addition regular food are indicated below:

First month	<ol style="list-style-type: none"><li>a. Milk in appropriate quantity (suitable diet modification may be advised if there is aversion to milk)</li><li>b. Sweet, cold and liquid diet</li></ol>
Second month	<ol style="list-style-type: none"><li>a. Milk medicated with sweet ingredients such dates and Kismish</li><li>b. Sweetened, milk treated with Shatavari</li></ol>
Third month	<ol style="list-style-type: none"><li>a. Milk with honey and ghee</li><li>b. Khichdi prepared using sesame, rice and green gram/Bengal gram. Cookies or laddoos made from them also suggested</li></ol>
Fourth month	<ol style="list-style-type: none"><li>a. Milk with butter</li><li>b. Cooked old rice with curd, pleasant food mixed with milk and butter</li><li>c. May include goat meat soup in diet (if non-vegetarians) or moong dal soup.</li></ol>
Fifth month	<ol style="list-style-type: none"><li>a. Ghee prepared with butter extracted from milk.</li><li>b. Cooked old rice with milk</li></ol>
Sixth month	<ol style="list-style-type: none"><li>a. Sweetened curd</li><li>b. Ghee medicated with sweet substances like Shatavari, Yashtimadhu etc</li><li>c. Mix 2gm of Gokshur (Tribulus terrestris) powder in a Glass of milk. Add sugar to it and drink daily.</li></ol>
Seventh month	<ol style="list-style-type: none"><li>a. Ghritakhanda (sweet dish prepared from milk medicated with sweet substances)</li></ol>
Eighth month	<ol style="list-style-type: none"><li>a. Rice gruel cooked with additions of milk and gee</li><li>b. Khichdi with ghee</li></ol>
Ninth month	<ol style="list-style-type: none"><li>a. Different varieties of cereals</li><li>b. Add Mulethi (Glycyrrhiza glabra) powder to hot milk and drink it.</li><li>c. Meat soup etc. (moong dal soup in case of vegetarians)</li></ol>

## b) Yogasana and Pranayama

- Yogasana and Pranayama should preferably be done in the morning on empty stomach.
- Asanans should be done after emptying the bowel.
- Ensure good ambience.
- Body movement should be slow, natural and easy, avoid harsh and forceful stretching of the body.

### Pre-natal

First Trimester			
Sl No	Yoga Practices	Rounds	Duration
1	<p><b>Loosening Exercises</b></p> <p><i>Neck Movements</i>            Forward and backward bending            Right and Left bending            Right and Left twisting            Neck rotation (Clockwise &amp; anti-clockwise)</p> <p><i>Shoulder movements</i>            Shoulder stretch            Shoulder rotation (forward &amp; backward)</p> <p><i>Knee movement</i></p> <p><i>Ankle movement</i>            Ankle rotation (Clockwise &amp; anti-clockwise)</p>	3 Rounds	8 Minutes
2	<p><b>Yogasanas</b></p> <p><i>Standing Posture</i></p> <p>Tadasana            Vrikshasana</p> <p><i>Sitting Posture</i></p> <p>Dandasana            Sukhasana</p> <p><i>Supine posture</i></p> <p>Shavasana</p>		10 minutes

3	<p>Breathing practices and Pranayama</p> <p><i>Breathing practices</i></p> <p>Sectional breathing: Abdominal, Thoracic and Clavicular breathing</p> <p><i>Pranayama</i></p> <p>Nadi Sodhana Pranayama Brahmari Pranayama Sitali Pranayama</p>	5 rounds each	20 minutes
<b>Second Trimester</b>			
1	<p><i>Neck Movements</i></p> <p>Forward and backward bending Right and Left bending Right and Left twisting Neck rotation (Clockwise &amp; anti-clockwise)</p> <p><i>Shoulder movements</i></p> <p>Shoulder stretch Shoulder rotation (forward &amp; backward)</p>	3 rounds each	5 minutes
2	<p><b>Yogasanans</b></p> <p><i>Standing Posture</i></p> <p>Tadasana Vrikshasana Trikonasana Katichakrasana Veerbhadrasana</p> <p><i>Sitting Posture</i></p> <p>Dandasana Sukhasana Bandhakonasana Shashankasana Marjariasana (with breathing)</p> <p><i>Supine posture</i></p> <p>Viparitarani with wall support Shavasana</p> <p><i>Prone posture</i></p> <p>Balāsana</p>		15 minutes

<b>Third Trimester</b>			
1	<p><b>Loosening Exercises</b></p> <p><i>Neck Movements</i></p> <p>Forward and Backward bending Right and Left bending Right and Left twisting Neck Rotation (clockwise &amp; anti-clockwise)</p> <p><i>Shoulder movements</i></p> <p>Shoulder stretch Shoulder Rotation (Forward &amp; Backward)</p> <p><i>Ankle Movement</i></p> <p>Ankle Rotation (Clockwise &amp; Anti clockwise)</p>	3 rounds	5 minutes
2	<p>Yogasanas</p> <p><i>Standing Postures</i></p> <p>Tadasana Trikonasana</p> <p><i>Sitting Postures</i></p> <p>Dandasana Sukhasana</p> <p><i>Supine Postures</i></p> <p>Shavasana</p>		15 minutes
3	<p>Pranayama</p> <p>Nadi Sodhana Pranayama Bhramari Pranayama Sitali Pranayama</p>	5 rounds each	8 minutes

## Post natal

Sl.No	Yoga Practices	Rounds	Duration
1.	Head and neck movements Shoulder rotation Spinal twist Hip rotation Knee rotation Ankle rotation and stretch Toe stretch	5 rounds	15 minutes
2.	<b>Asanas</b> <b><i>Standing Asanas</i></b>  Padahasthana Tadasana  <b><i>Sitting Asanas</i></b>  Padmasana Vajrasana Ushtrasana  <b><i>Prone Asanas</i></b>  Bhujangsana Salabhasana  <b><i>Supine Asanas</i></b>  Savasana Viparitakarani Sethubandasana	Duration -30 seconds	20 minutes
3.	<b>Breathing exercises</b> Hands in and out breathing Hands stretch breathing Sasankasana breathing	5 to 10 times	5 to 10 minutes
4.	<b>Pranayama</b> Nadishudhi pranayama Cooling pranayama	5 rounds each	5 minutes
5.	<b>Relaxation technique</b> Deep relaxation technique	1 time	5 to 10 minutes

### **Care of Mother during Puerperium (Sutika).**

- a. Oil massage: Whole body massage with oil especially on back abdomen every day is found to be beneficial. This relieves pain, helps in early involution of uterus. Medicated oil like Bala Taila or any other locally available oil like mustard, coconut may be used. This may be followed by exposure to early morning sun rays to mother with her child properly covering the eyes to avoid direct exposure to sunlight.
- b. Washing of genitalia: washing the vagina with warm water or medicated decoction made of Neem leaves, turmeric, drying and applying oil aids healing and prevents infection.
- c. Abdominal binder: Binding of lower abdomen with clean, comfortable, broad and of sufficient length provides support. Readymade binders can also be used
- d. Emphasizing the importance of using contraceptive method for spacing or limiting the size of the family.
- e. After birth care of soft tissue and cracked nipple will be done by application of Jatyadi taila.
- f. Anaemia can be managed by giving Punarnavadi mandura tab 250mg b.d.
- g. Secretion of milk will be managed by Shatavari granule 5gm b.d. with milk.
- h. Any other problems can be managed as per need.

### **Life Style modification advices**

- Life Style of mother has a pivotal role in the growth and development of foetus. Hence appropriate behaviour in a pregnant mother should be incorporated.
- Place of residence: Ventilated, fumigated free from mosquitoes etc.
- Recitation of hymns, music, instruments etc in home which can relax her and help to maintain a happy mood and positive impact on foetus.
- Bowel: Timely bowel and urinal habits.
- Daily bath with clean or fragrant water
- She should always wear clean, loose, auspicious, light coloured cotton garments.
- Pregnant women must be cheerful, relax and pious.
- Sleeping and sitting place should be low, covered with soft cushion with support and should be perfect and very comfortable.

- Mother should take minimum 8 hrs sleep at night and 2 hrs rest at daytime, early to bed and early to rise.
- High heel shoes should better be avoided in pregnancy. Constricting belt should be avoided
- Good dental and oral hygiene should be maintained.
- Simple home remedies like chewing pomegranate and mint leaves and intake of decanted water of soaked tamarind, decoction of clove, small cardamom and greater cardamom in small quantity can be taken for treatment of morning sickness
- Massage with oils like Rowghan-i-Bābūna, Rowghan-i-Mālkanganī, and RowghanSurkh can be done to relieve backache
- 6 gm of husk of Aspghol (*Plantago ovata* Forssk.) can be taken to relieve constipation
- Maintenance of mental health along with beneficial diet and mode of living is necessary during pregnancy. Maintaining good mental health provides good physique on foetus.
- Music Therapy: Vocal or instrumental –Environment can be made pleasant with music therapy.

### **Post-natal care for mother**

- a. Adopt an empathetic approach and communicate with the woman and her family members to understand her needs and concerns.
- b. Perform a comprehensive examination including assessing pulse, temperature, blood pressure, monitoring for signs of post-partum hemorrhage, and evaluating uterine contraction status.
- c. Subsequent health checkups should cover various aspects such as monitoring micturition and bowel movements, sleep patterns, lactation establishment, and any other health issues. Additionally, assess pulse, blood pressure, temperature, anemia status, breast health, uterine involution, lochia characteristics (odor, color, amount), and inspect perineal wounds if present.

### **Advise to Nursing Mother**

- a. Initiate breast feeding especially colostrums feeding within an hour of birth
- b. Breast milk is a complete source of nutrition to the baby for first 6 months
- c. It helps in developing bonding between mother and baby. Ensure good attachment of the baby to the breast.

d. Helps in delaying pregnancy through suppression of ovulation and protects baby against infection

f. Do not give any pre-lacteal feeds. Pre-lacteal feeds may not be hygienic and can cause intestinal infections in the baby leading to diarrhea

d. Exclusively breast feed the baby for six months

e. Breast feed the baby whenever he/she demands milk

13. Three months after the initiation of interventions, a comprehensive review will be conducted to evaluate the effectiveness of the Supraja program. The review process will involve assessing the impact of interventions on the health and well being of enrolled students, identifying any challenges and making necessary adjustments to the program for improved outcomes.

14. Training of all the Supraja team members on their roles and responsibilities before the implementation of the program.

15. Track and monitor the activities undertaken in each supraja clinic and document it.

## **Do's and Don'ts**

### ***Do's***

- Encourage exclusive breastfeeding for the first 6 months of the baby's life.
- Ensure breasts are emptied after feeding to prevent engorgement.
- Incorporate bathing with water medicated with leaves of Nirgundi, Erand, and Nimba, along with a whole-body oil massage.
- Consider the mother's strength and digestive tolerance when advising her diet in the first 10 days postpartum.
- Recommend foods that stimulate digestion (agni), such as freshly cooked warm soups, boiled rice scum, gruel, and Dalia. Add spices like Pippali or Shunthi powder and ghee. Halwa made with wheat flour, almonds, pistachios, raisins, sugar, and ghee can be beneficial.
- Drink only lukewarm water (boiled) for hydration.
- Avoid raw and cold foods, as well as flatulence-causing foods like potatoes and Bengal gram. Instead, include whole green gram and milk products in the diet.

- Gradually the women should be introduced to normal diet. Jaggery is recommended as sweetener
- Maintain a happy and cheerful disposition.
- Maintain personal and environmental hygiene
- Observe abstinence for up to 6 weeks postpartum.
- Schedule postnatal checkups and adhere to the immunization schedule for both mother and baby

### ***Don'ts***

- Prevent constipation by consuming an adequate amount of whole cereals, pulses, vegetables, and liquids.
- Refrain from fasting during pregnancy to ensure adequate nutrition for both the mother and baby.
- Avoid engaging in strenuous work that may pose risks to maternal and fetal health.
- Do not self-medicate; always consult a healthcare professional before taking any medications during pregnancy.
- Avoid excessive consumption, excessive exertion, and mental stress to maintain overall well-being during pregnancy.

### **Training and capacity building**

- ❖ State and district level training for AYUSH medical officers, multi-purpose worker, and frontline workers.
- ❖ Facility level hands-on trainings for onsite staff.
- ❖ Annual refresh trainings to sustain knowledge and upgrade the skills.

### **General Instructions**

- Maintain a clean, safe, and welcoming environment.
- Ensure a patient-centric approach in healthcare delivery.
- Respect patient privacy and confidentiality.
- Adhere to ethical and professional standards.
- Adhere to all relevant central and state policies.
- Comply with all relevant healthcare regulations and standards.
- Adhere to Ayurvedic treatment principles.
- Continuously update knowledge and skills by attending all training and orientation sessions.

- Ensure patient safety and follow emergency procedures.
- Conduct regular team meetings for collaboration and problem-solving.
- Promote a positive image of Ayurveda and the project within the community.

### **Organization structure**

#### *Project Monitoring Committee (State Level)*

- Chairman-State Mission Director
- Convenor- SPM Ayurveda
- Members- DMO, DPM

#### *Project Monitoring Committee (District Level)*

- Chairman- DMO
- Convenor-DPM
- Members-Head of the Institution
- Project Medical Officer

#### *Project Team*

- Project Convenor
- Project Medical Officer (NAM)
- Supporting Staff

**State Convener:** The State Convener is responsible for overseeing the operation of Supraja in the state. This includes developing and implementing policies and procedures, coordinating with the state government, and providing support to the District Project Coordinators.

**State Project Coordinator:** The State Project Coordinator is responsible for assisting the State Convener in managing the Supraja program. This includes developing and implementing training programs, collecting and analyzing data, and preparing reports.

**District Project Coordinator:** The District Project Coordinator is responsible for overseeing the operation of Supraja programme in the district. This includes developing and implementing local policies and procedures and providing support to the NAM Medical Officers.

### **Performance Indicators for Supraja Program**

1. Total number of awareness session conducted
2. Total number of pregnant women screened
3. Total number of beneficiaries of post-natal care

4. Total number of beneficiaries of antenatal care
5. Total number of uncomplicated institutional deliveries with better mother and infant health.

### **Program Rollout:**

- a) Phase 1 (Month1-6): Pilot in selected districts
- b) Phase 2 (Month 6-12): Expand to additional districts.
- c) Phase 3 (Months 12 onwards): Statewide rollout.

### **Infrastructure and equipment required**

#### **Equipment list**

1. Stethoscope
2. Thermometer
3. Blood pressure monitor
4. Stadiometer
5. Pulse oximeter
6. Fetal doppler
7. Weighing machine
8. Examination table
9. Chairs for patient assessments
10. Registers – OPD Register, Prescription register, Investigation register, Referral register, Awareness session register, Medical camp register, Follow-up register, Stock Register

### **Other supportive materials required**

- I. IEC Material
  - i. Flex
  - ii. Banner
  - iii. Pamphlets
  - iv. Standees

## **CASE PROFORMA**

### **Antenatal case proforma**

Serial no:

OP No:

Name:

Age:

Address:

Occupation:

Name of the nearest relative:

Phone no:

Present obstetric history

LMP:

EDD:

Scan EDD:

First trimester:

Second trimester:

Third trimester:

Presenting complaints with duration:

Previous obstetric history:

Number	Date	Antenatal Period	Mode of delivery	Puerperium	Wt and condition of baby at birth	Present condition of the baby

Menstrual history:

Past illness (Medical/Systemic):

Family history:

Personal history:

Immunization history:

## EXAMINATIONS

### General Examination

Built:

Height:

Weight:

BMI:

Pallor:

Cyanosis:

### Systemic:

CVS:

RS:

Breast:

### Obstetrical examination

Date	Weight	BP	Fundal height	FHR	FM	Remarks

**Investigations**

Blood group : Patient:

Husband:

TSH

GTT

Hb

Date	Investigations	Values

Ultrasound scan

First trimester:

Second trimester:

Third trimester

Other investigations if any;

Interventions:

Conventional system:

**Ayurvedic antenatal care:**

Date	Trimester	Complaint if any	Medicine	Yogasana & Pranayama

**Ayurvedic post-natal care**

Date	Trimester	Complaint if any	Medicine	Yogasana & Pranayama

**Observation & Follow-up chart**

<b>Date</b>	<b>Complaints</b>	<b>Observation</b>	<b>Medicine</b>	<b>Review</b>

**Yoga and Pranayama register**

Date	No of total Antenatal care Yoga beneficiaries			No of total post-natal care Yoga beneficiaries
	First Trimester	Second Trimester	Third Trimester	

**Outreach activity /Awareness session register**

Sl No	Date	Name of Anganwadi/ Health centre	Panchayath	Ward No.	No of beneficiaries

**OP Register**

Sl No	Name	Age	Place	ANC/PNC	Awareness session attended date & place



